

FIG. 1A-1
FIG. 1A-2

FIG. 1A

GAATCCCCCAACAGAGCCAAGCTCTCCATCTAGTGGACAGGGAAGCTAGCAGCAACACC	39 (UPPER: SEQ ID NO.: 1)
	19 (LOWER: SEQ ID NO.: 4)
TTCCCTTCACTACAAACTTCATTGCTTGGCCAAAAGAGAGTTAATTCAATGTAGACAT	119
	39
CTATGTAGGCAATTAAAAACCTATTGATGTATAAAACAGTTTGCAATTCATGGAGGGCAAC	179
	59
TAAATACATTCTAGGACTTTATATAAAGATCACCTTTTATTTATGCACAGGGTGAACAAG	239
	79
ATGGATTATCAAGTGTCAAGTCCAATCTATGACATCAATTATTATACATCGGAGCCCTGC	299
M D Y Q V S S P I Y D I N Y Y T S E P C	99

1/20

#4

FIG. 1A-1

CAAAATCAATGTGAAGCAATCGAGCCCGCCTCCTCGCTCTACTCACTGGTG 359
 Q K I N V K Q I A A R L L P P L Y S L V 119

 TTCATCTTTGGTGGCAACATGCTGGTCATCCTCATCTGATAAACTGCAAAAGG 419
 F I F G F V G N M L V I L I L I N C K R 139

 CTGAAGAGCATGACTGACATCTACCTGCTCAACCTGGCCATCTCTGACCTGTTTTCCTT 479
 L K S M T D I Y L L N L A I S D L F F L 159

 CTTACTGTCCCTTCTGGGCTCACTATGCTGCCGCCAGTGGGACTTTGGAAATACAATG 539
 L T V P F W A H Y A A A Q W D F G N T M 179

 TGTCAACTCTTGACAGGGCTCTATTTTATAGGCTTCTCTGGAATCTTCTTCATCATC 599
 C Q L L T G L Y F I G F F S G I F F I I 199

 CTCCTGACAAATCGATAGGTACCTGGCTGTCTGCTCCATGCTGTGTTTGCTTTAAAGCCAGG 659
 L L T I D R Y L A V V H A V F A L K A R 219

 ACGGTCACCTTTGGGGTGGTGACAAGTGTGATCACTTGGGTGGCTGTGTTTGGCTCT 719
 T V T F G V V T S V I T W V V A V F A S 239

 CTCCCAGGAATCATCTTTACCAGATCTCAAAAGAAGTCTTATTACACCTGCAGCTCT 779
 L P G I I F T R S Q K E G L H Y T C S S 259

CATTTCATACA
 H F P Y

FIG. 1A-2

FIG. 1B-1
FIG. 1B-2

FIG. 1B

GAATCCCCCAACAGAGCCAAAGCTCTCCATCTAGTGGACAGGAAGCTAGCAGCAACCC	59 (UPPER: SEQ ID NO.: 2)
	19 (LOWER: SEQ ID NO.: 5)
TTCCCTTCACTACAAAACCTTCATTGCTTGGCCAAAAGAGAGTTAATTCAATGTAGACAT	119
	39
CTATGTAGGCAATTAAAAACCTATTGATGTATATAAACAGTTTGCAATTCATGGAGGGCAAC	179
	59
TAAATACATTCTAGGACTTTATAAAAGATCACTTTTATTATGCACAGGGTGGAACAAG	239
	79
ATGGATTATCAAGTGTCAAGTCCCAATCTATGACATCAATTATTATACATCGGAGCCCTGC	299
M D Y Q V S S P I Y D I N Y Y T S E P C	99

FIG. 1B-1

CAAAAATCAATGTGAAGCAAAATCGCAGCCCGCCTCCTCGCTCTACTCACTGGTG 359
 Q K I N V K Q I A A R L L P P L Y S L V 119

 TTCATCTTTGTGTTGTGGCAACATGCTGGTCACTCCTCATCTGATAAACTGCAAAAGG 419
 F I F G F V G N M L V I L I L I N C K R 139

 CTGAAGAGCATGACIGACATCTACCTGCTCAACCTGGCCATCTCTGACCTGTTTTCCTT 479
 L K S M T D I Y L L N L A I S D L F F L 159

 CTTACTGTCCCTTCTGGGCTCACTATGCTGCCGCCAGTGGGACTTTGGAAATACAATG 539
 L T V P F W A H Y A A A Q W D F G N T M 179

 TGTCAACTCTTGACAGGGCTCTATTTTATAGGCTTCTCTCTGGAATCTTCTTCATCATC 599
 C Q L L T G L Y F I G F F S G I F I I 199

 CTCCTGACAAATCGATAGGTACCTGGCTGCTGCCATGCTGTGTTTGCTTTAAAGCCAGG 659
 L L T I D R Y L A V V H A V F A L K A R 219

 ACGGTCACCTTTGGGGTGGTGACAAGTGTGATCACTTGGGTGGTGGCTGTGTTTGCCTCT 719
 T V T F G V V T S V I T W V V A V F A S 239

 CTCCCAGGAATCATCTTTACCAGATCTCAAAAAGAGTCTTCATTACACCTGCAGCTCT 779
 L P G I I F T R S Q K E G L H Y T C S S 259

 CATTTTCCATACAGTCAGTATCAATTCTGGAAGAATTTCCAGACATTAAGATAGTCATC 839
 H F P Y S Q Y Q F W K N F Q T L K I V I 279

FIG. 1B-2

TTGGGCTGGTCCTGCCGCTGCTTGTCACTGCTACTCGGGAATCCTAAAACCT 899
 L G L V L P L L V M V I C Y S G I L K T 299
 CTGCTTCGGTGTGAAATGAGAAGAGAGCAGGGCTGTGAGGCTTATCTTCACCATC 959
 L L R C R N E K K R H R A V R L I F T I 319
 ATGATTGTTTATTTCTCTTCTGGGCTCCCTACAACATTGTCCTTCTCCTGAACACCTTC 1019
 M I V Y F L F W A P Y N I V L L L N T F 339
 CAGGAATTCTTTGGCCTGAATAATTGCAGTAGCTCTAACAGTTGGACCAAGCTATGCAG 1079
 Q E F F G L N N C S S S N R L D Q A M Q 359
 GTGACAGAGACTCTTGGGATGACGCACCTGCTGCATCAACCCCATCATCTATGCCCTTGTG 1139
 V T E T L G M T H C C I N P I I Y A F V 379
 GGGGAGAAGTTCAGAACTACCTCTTAGTCTTCTTCCAAAAGCACATTGCCAAACGCTTC 1199
 G E K F R N Y L L V F F Q K H I A K R F 399
 TGCAAATGCTGTCTATTTTCCAGCAAGAGGCTCCGAGCGAGCAAGCTCAGTTACACC 1259
 C K C C S I F Q Q E A P E R A S S V Y T 419
 CGATCCACTGGGGAGCAGGAAATATCTGTGGGCTTGTGACACGGACTCAAGTGGGCTGGT 1319
 R S T G E Q E I S V G L * 439
 GACCCAGTCAGAGTTGTGCACATGGCTTAGTTTTCATACACAGCCTGGGCTGGGGTNGG 1379
 459
 TTGGNNGAGGTCTTTTTTAAAGGAAGTTACTGTGTATAGAGGGTCTAAGATTTCATCCATT 1439
 479
 TATTGGCATCTGTTTAAAGTAGATTAGATCCGAATTC

FIG. 1B-3

FIG. 1D-1
FIG. 1D-2

FIG. 1D

GAATTCCTCCCAACAGAGCCCAAGCTCTCCATCTAGTGGACAGGGAAGCTAGCAGCAAACC	59 (UPPER: SEQ ID NO. 3) 19 (LOWER: SEQ ID NO. 6)
TTCCCTTCACTACAAACTTCATTGCTTGGCCAAAGAGAGTTAATTCATGTAGACAT	119 39
CTATGTAGGCAATTAAAAACCTATTGATGTATAAAACAGTTTGCATTCATGGAGGCAAC	179 59
TAAATACATTCTAGGACTTTATAAAAGATCCTTTTATTATGCACAGGGTGAACAAG	239 79
ATGGATTATCAAGTGTCAAGTCCAATCTATGACATCAATTATTATACATCGGAGCCCTGC	299 99
M D Y Q V S S P I Y D I N Y Y T S E P C	

FIG. 1D-1

CAAAAATCAATGTGAAGCAAAATCGAGCCCGCTCCTGCTCCGCTCTACTCACTGGTG 359
 Q K I N V K Q I A A R L L P P L Y S L V 119
 TTCATCTTTGGTTTGTGGGCAACATGCTGTCATCCTCAICCTGATAAACTGCAAAAGG 419
 F I F G F V G N M L V I L I L I N C K R 139
 CTGAAGAGCATGACTGACATCTACCTGCTCAACCTGGCCATCTCTGACCTGTTTTCCTT 479
 L K S M T D I Y L L N L A I S D L F F L 159
 CTTACTGTCCCTTCTGGGCTCACTATGCTGCCGCCAGTGGGACTTTGGAAATACAATG 539
 L T V P F W A H Y A A A Q W D F G N T M 179
 TGTCAACTCTTGACAGGGCTCTATTTATAGGCTTCTCTGGAATCTTCTTCATCATC 599
 C Q L L T G L Y F I G F F S G I F I I 199
 CTCCTGACAATCGATAGGTACCTGGCTGTCGTCATGCTGTGTTTGCTTTAAAGCCAGG 659
 L L T I D R Y L A V V H A V F A L K A R 219
 ACGGTCACCTTTGGGGTGGTGACAAAGTGTGATCATTGGGTGGTGGCTGTGTTGCGTCT 719
 T V T F G V V T S V I T W V V A V F A S 239
 CTCCAGGAATCATCTTTACCAGATCTCAAAAGAAGTCTTCATTACACCTGCAGCTCT 779
 L P G I I F T R S Q K E G L H Y T C S S 259
 CATTTCCATACATTAAAGATAGTCATCTTGGGGTGGTCTCCGCTGCTGTTGTCATGGT 839
 H F P Y I K D S H L G A G P A A A C H G 279

FIG. 1D-2

[illegible]

GAATTC

FIG. 1D-3

FIG. 2A

FIG. 2A
FIG. 2B

FIG. 2

		I	II
CCR5	1 MDYQVSSPIYDINYYTSEPCQKINVKQIAARLLPPLYSLVFIFGFVGNMLVILLINCKRLKSMTDIYLLNLAISDLFFLLT		83
hCC-R2b	6 MLSTSRSRFIRNTNESGEEVTTFFDYDYGAPECHKFDVKQIGAQLLPPLYSLVFIFGFVGNMLVILLINCKRLKCLTDIYLLNLAISDLFFLLT		95
hCC-R3	MTTSLDTVETFGTTSYDDVGLLCEKADTRALMAQFVPPPLYSLVFTVGLIGNVVMILIKYRRLRIMTNIYLLNLAISDLFFLV		87
hCC-R1	METPNTTETDYDTTTEFDYGDATPCQKVNERAFGAQLPPLYSLVFVIGLVGNILVVLVQVKRLKNMTSIYLLNLAISDLFFLFT		87
hCC-R4	MNPTDIADTTLDESISNYLYESIPKPTKEGKAFGELEFLPPLYSLVFVFGLLGNSVVMVLFKVKRLRSMTDVYLLNLAISDLFFVFS		92

		III	IV
CCR5	VPFWAHYA.AAQWDFGNIMCQLLTGLYFIGFFSGIFFIILLTIDRYLA.WHAVFALKARTVTFGVVTSVITWVAVFASLPGIIFTRSQKEGLH		177
hCC-R2b	LPLWAHSA.ANEWVFGNIMCKLFTGLYHIGYFGGIFFIILLTIDRYLA.WHAVFALKARTVTFGVVTSVITWVAVFASVPGIIFTKQKEDSV		189
hCC-R3	LPFWHYVRGHNWVFGHMCNLLSGFYHTGLYSEIFFIILLTIDRYLA.WHAVFAIRPARTVTFGVITTSVITWGLAVLAALPEFIFYETEELFEE		182
hCC-R1	LPFWIDYKLKDDWVFGDAMCKILSGFYHTGLYSEIFFIILLTIDRYLA.WHAVFAIRPARTVTFGVITTSIITWALAILASMPGLYFSKTQWEFTH		182
hCC-R4	LPFWGYA.ADQWVFLGICRMISMMYLVGFYSGIFFVIMLSIDRYLA.WHAVFSIRARTLTYGVITSLATWSVAVFASLPGLFSTCYTERNH		186

FIG. 2A

CCR5
hcc-R2b
hcc-R3
hcc-R1
hcc-R4

YTCSSHPFYSQYF WKNFQTLKI VILGLVPLLVVICYSGLKTLRCRNEKKRHRVRLIFTIMIVVFLFWA PYNIVLLNTFQEFFGLNNC 272
 VMCGPYFPRG... WNNFHTIMRNILGLVPLLVVICYSGLKTLRCRNEKKRHRVRLIFTIMIVVFLFWA PYNIVLLNTFQEFFGLSNC 280
 TLCSALPEDTVYSMRHHTLRMTIFQLVPLLVMAICYTGITKTLRCPSKKK.YKARLIFVIMAVFFFTWTPYNVAILLSSYQSILFGNDC 276
 HTCSLHFFHESLREWKLFQALKLNLFGLVPLLVMAICYTGITKTLRCRNEKK.SKAVRLIFVIMAVFFFTWTPYNLTILISVFQDFLFTHEC 276
 TYCKTKYSLSNST.TWKVLSSEINILGLVPLLVVICYSGLKTLRCRNEKK.NKAVKMI FAVVVLFGFWTPYNIVLFLFTTVELEVQLQDC 279

VI

V

CCR5
hcc-R2b
hcc-R3
hcc-R1
hcc-R4

SSSNRLDQAMQVTEILGMTHCCINPIIYAFVGEKFRNVLIVFFQKHIAKR.FCKCCSIFQOEAPERASSVYTRSTGEQEISVGL 352
 ESTSQLDQATQVTEILGMTHCCINPIIYAFVGEKFRNVLIVFFQKHIATKR.FCKCCPVFYREITVDGVTSTNIPSTGEQEVSIAGL 360
 ERSKHLDLVMIIVTEVIAYSHCCMNPVIYAFVGERFRKYLRRHFFHRHLLMH.LGRYIPFLPSEKLERISSV.SPSTAEPELSIVF 355
 EQSRHLDLAVQVTEVIAYTHCCVNPVIYAFVGERFRKYLRLQLEHRRVAVH.LVKWLPFLSVDRLERVSSIT.SPSTGHHLSAGF 355
 TERRYLDYAIQATETIAFVHCCINPIIYFELGEKFRKYLQLEKTCRGLFVLQYCGLLQIYSADTPSSSYTQSTMDHDLHDAL 360

VII

FIG. 2B

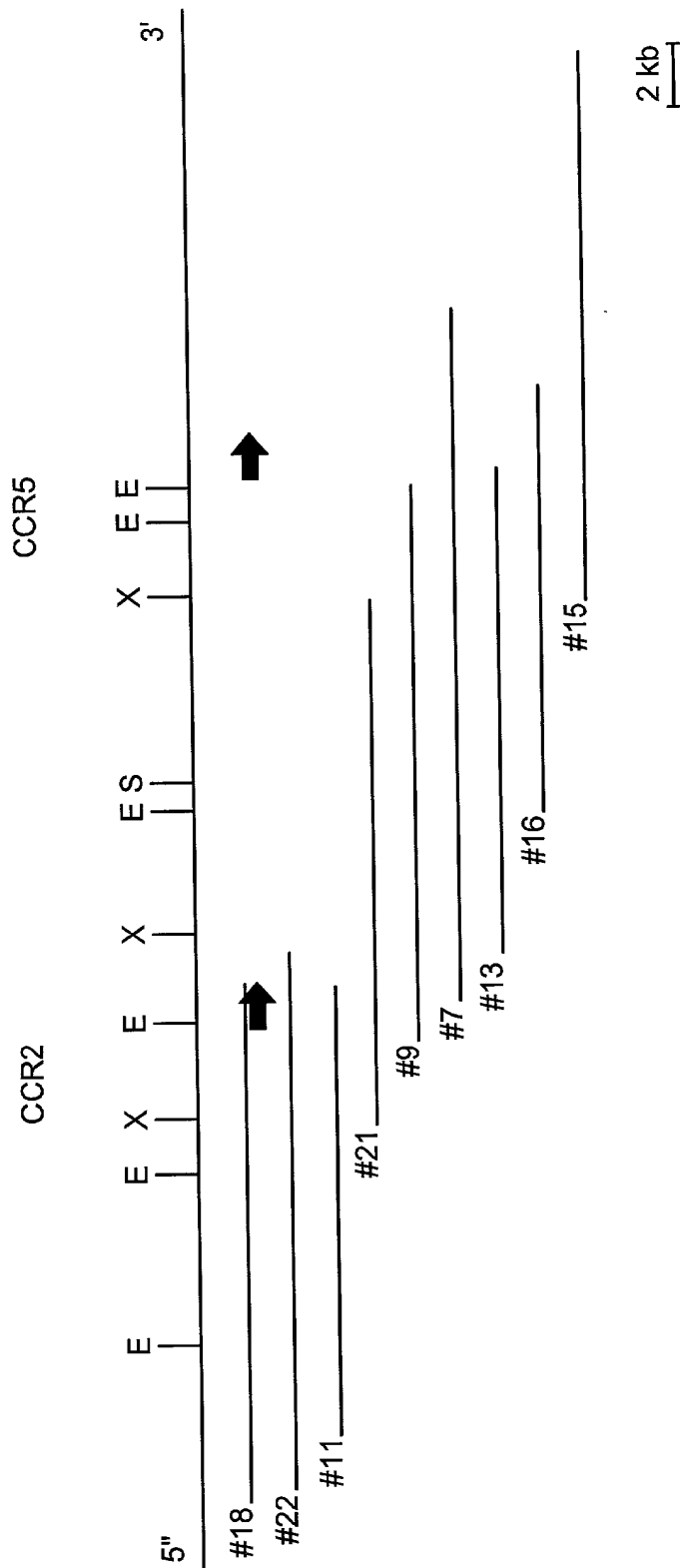


FIG. 3

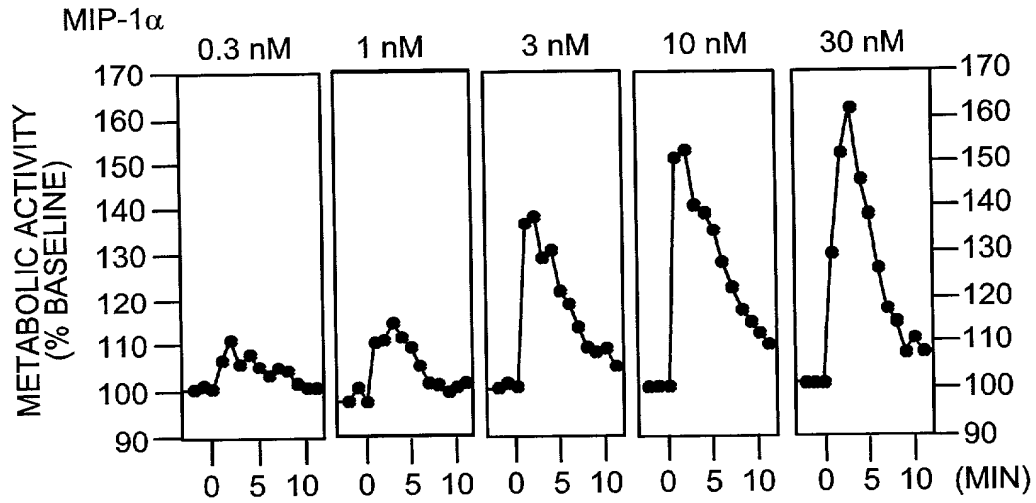


FIG. 4A

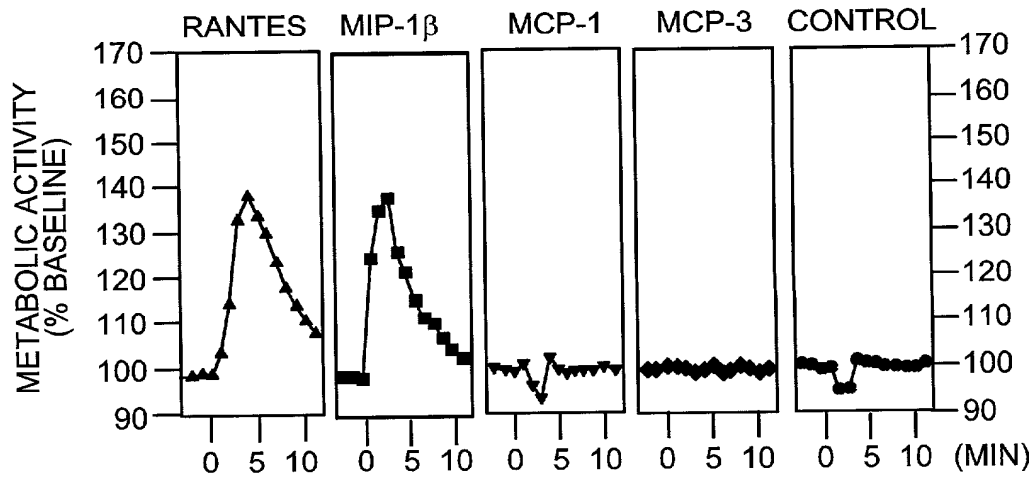


FIG. 4B

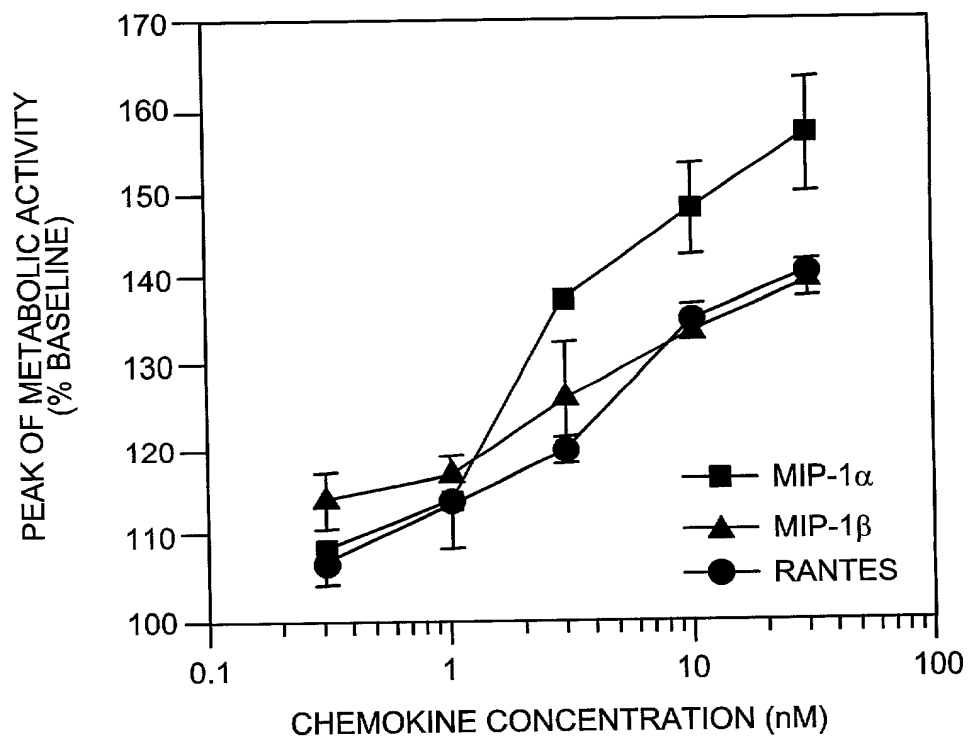


FIG. 4C

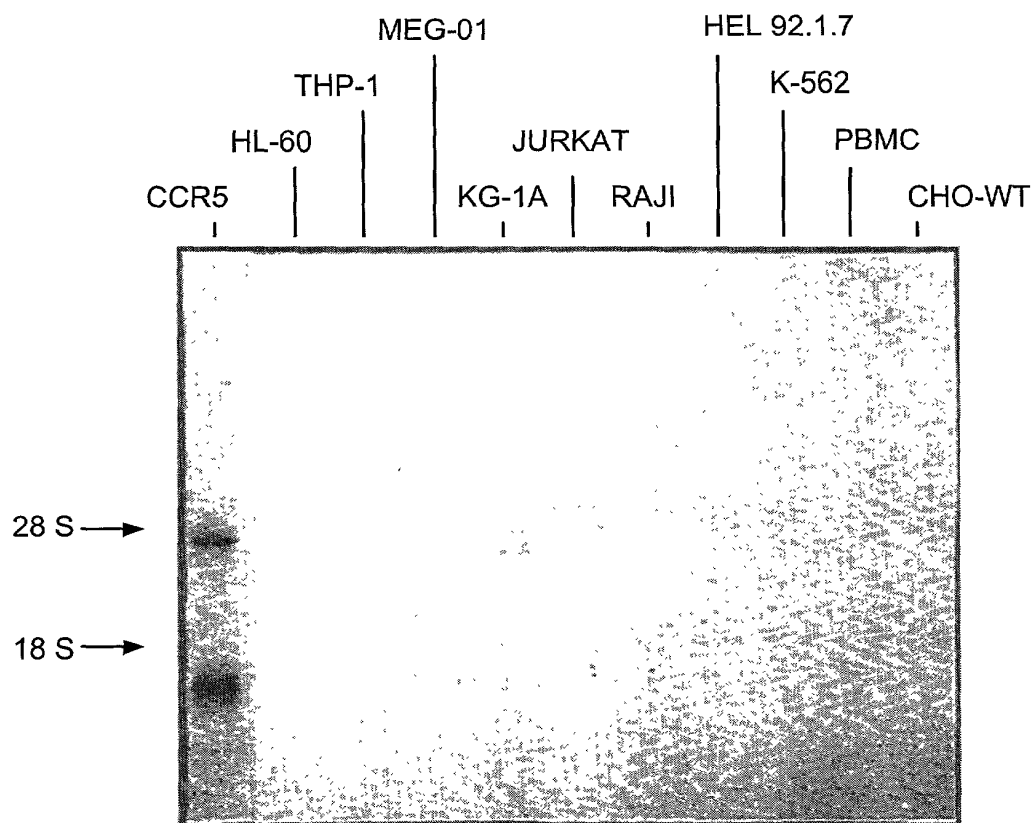
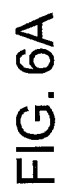


FIG. 5



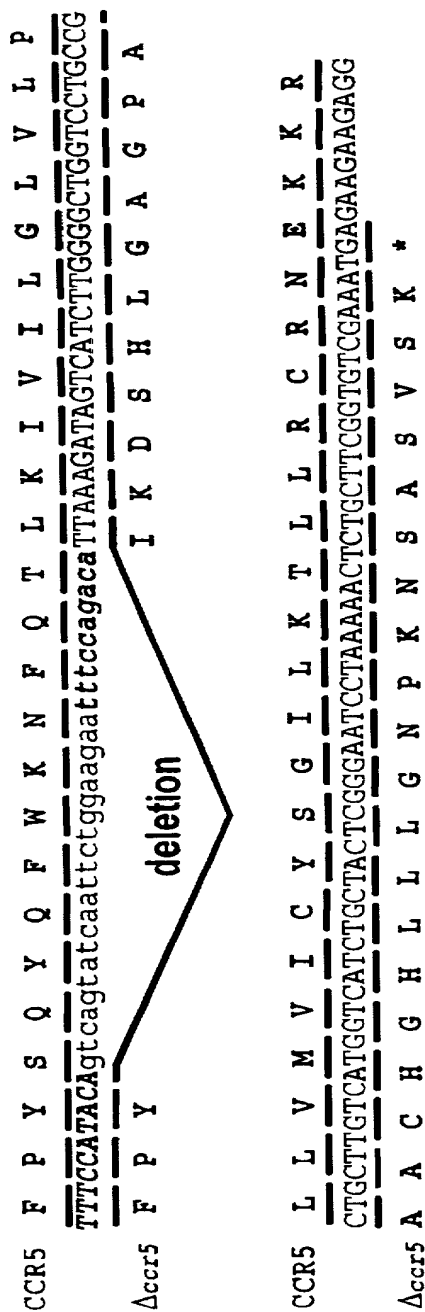


FIG. 6B

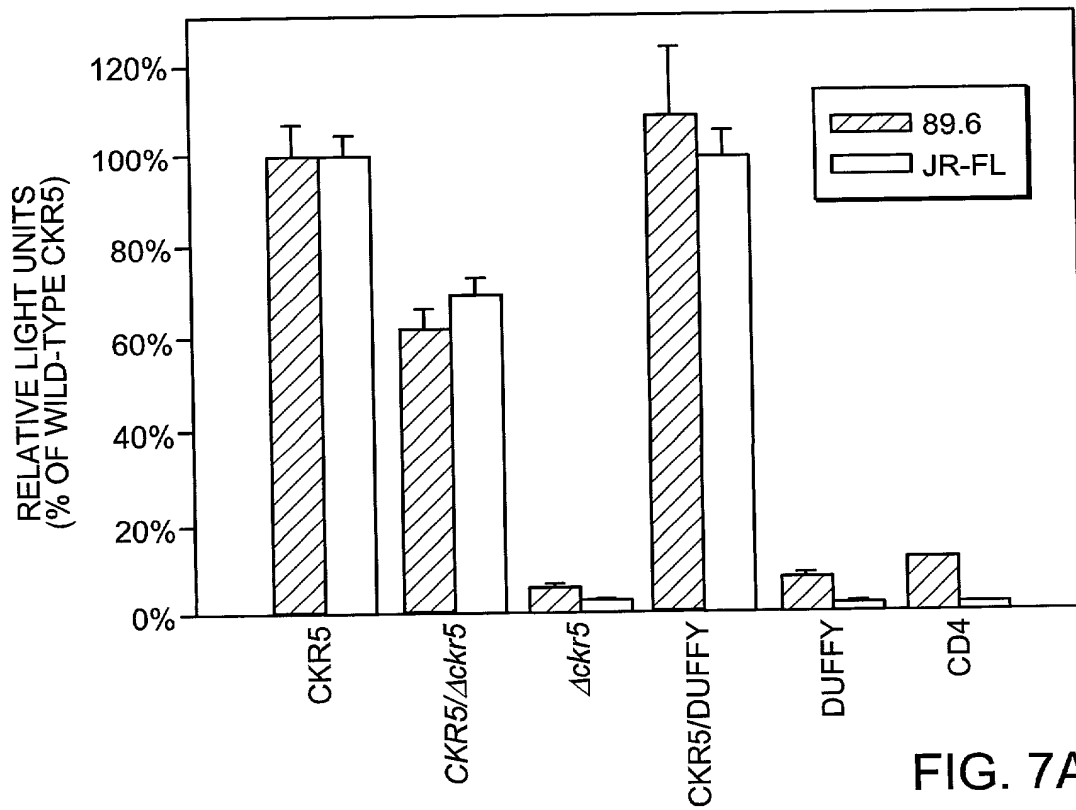


FIG. 7A

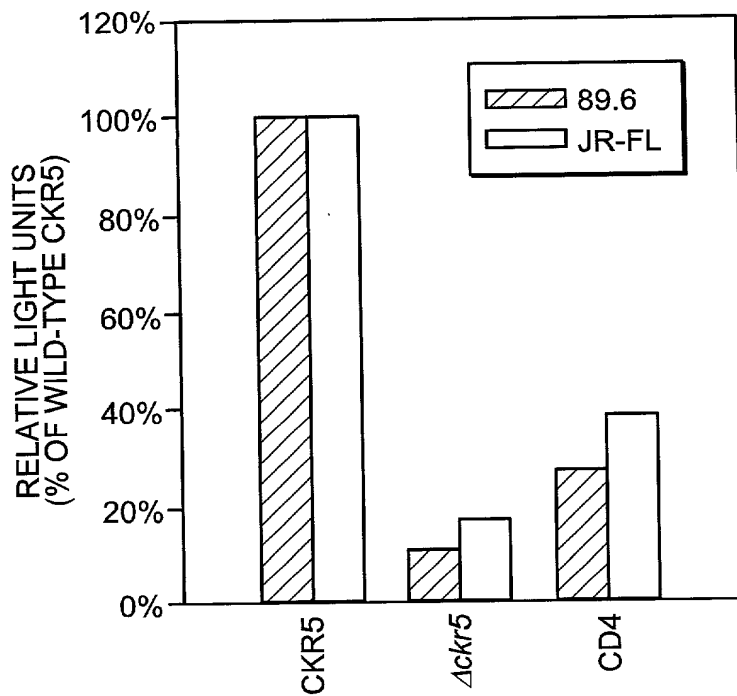


FIG. 7B

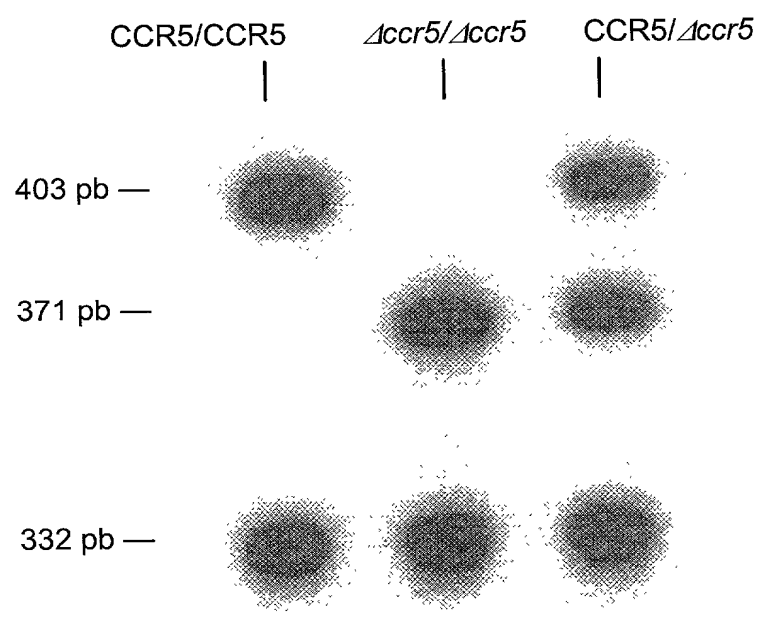
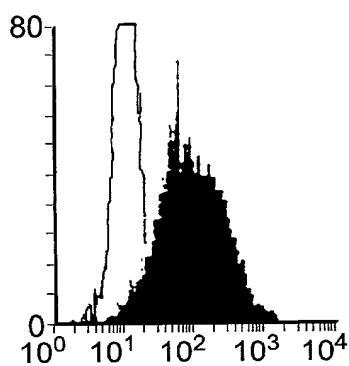
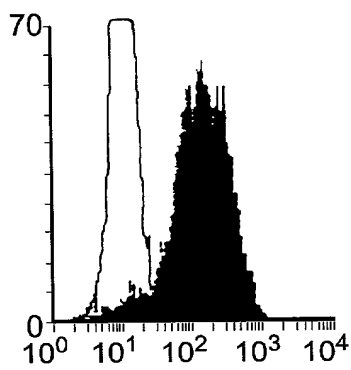


FIG. 8



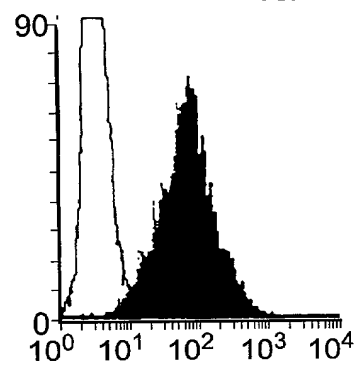
A0

FIG. 9A



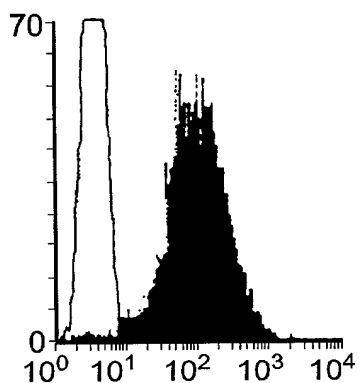
A1

FIG. 9B



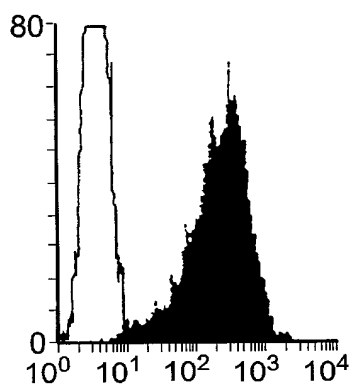
A2

FIG. 9C



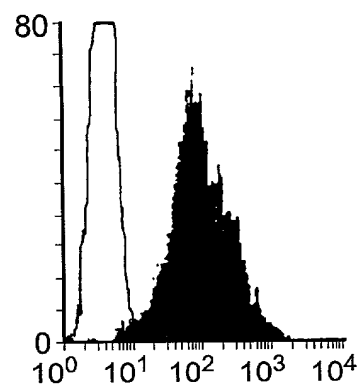
A5

FIG. 9D



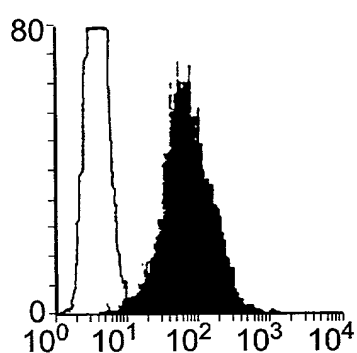
A4

FIG. 9E



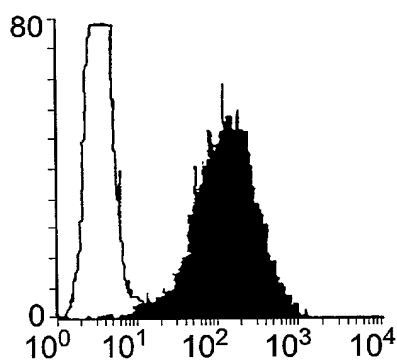
B0

FIG. 9F



B1

FIG. 9G



B3

FIG. 9H

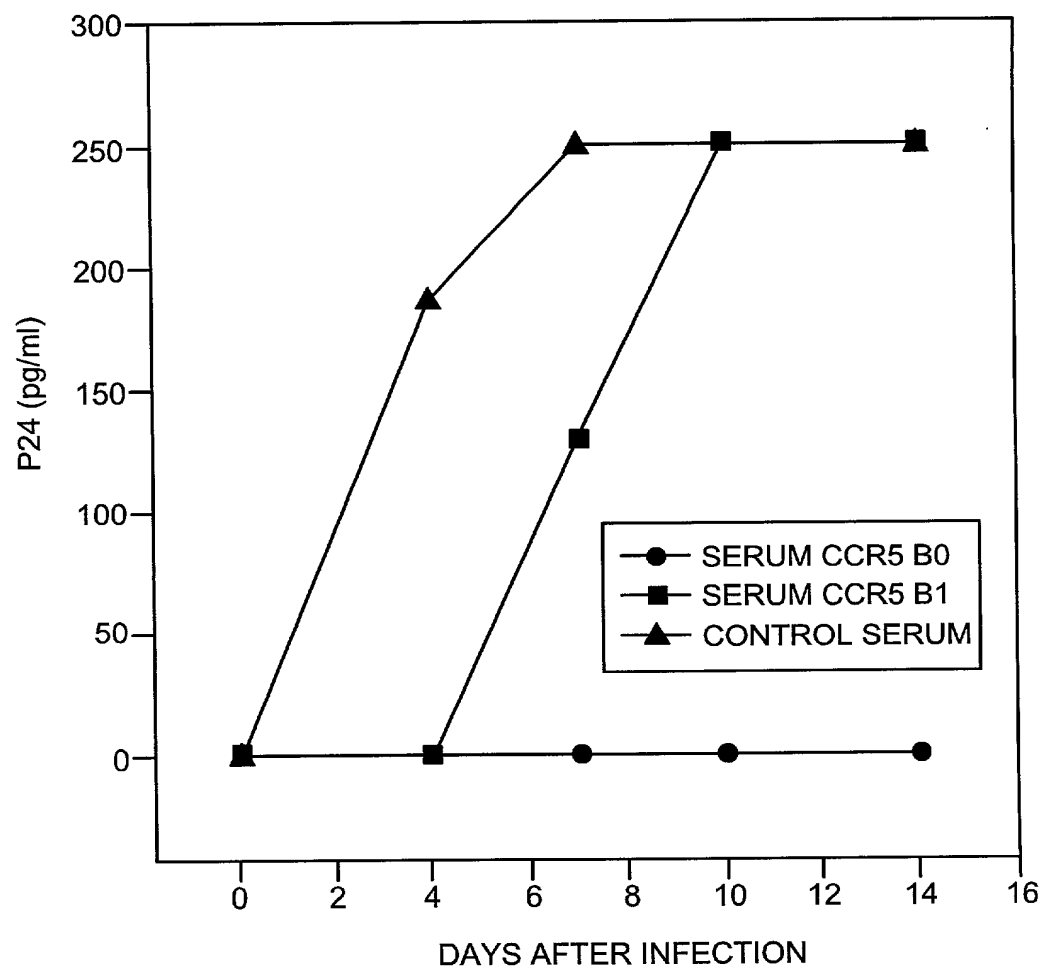


FIG. 10